June 3, 1968

main

FOREIGN AGRICULTURE

U.S. EXPORTS BY COUNTRY OF DESTINATION
DATA SOURCE—U.S. CENSUS
MONTHLY———CUMULATIVE FOR PERIOD OF———

COUNTRY	JAN	FEB	M
CANADA	4,445	9,491	13
MIQUEL	1	1	
MEXICO	2,027	4,225	6
GUATMAL	141	284	
BR HOND	35	79	
SALVADR	60	137	
HONDURA	55	53	
NICARAG	60	90	
C RICA	82	99	
PANAMA	103	153	
BERMUDA	80	165	
BAHAMAS	620	1,194	1
JAMAICA	227	437	
HAITI	141	320	
DOM REP	51	279	
LW LW I	57	151	
BARBADO	44	89	
TRINID	77	176	
N ANTIL	68	173	
F W IND	30	56	
COLOMB	51	493	
VENEZ	367	763	1
B GUIAN	31	47	
SURINAM	39	104	
F GUIAN	8	14	
ECUADOR	361	563	
PERU	520	607	
BOLIVIA		1	
CHILE			
BRAZIL	33	82	
PARAGUA	3	3	
URUGUAY			
ARGENT	1	42	
ICELAND			
SWEDEN	137	406	
NORWAY	60	181	
FINLAND	3	84	
DENMARK	24	64	
U KING	3,252	6,281	9
IRELAND		5	
NETHLDS	2,021	3,981	5
BELGIUM	510	1,012	1
FRANCE	1,866	3,606	5
W GERM	1,388	2,780	4
E GERM	94	307	
AUSTRIA	35	190	

U.S. EXPORTS BY COUNTRY OF DESTINATION
DATA SOURCE—U.S. CENSUS
MONTHLY———CUMULATIVE FOR PERIOD OF———

COUNTRY	JAN	FEB	M
CZECHO	167	319	
HUNGARY	16	97	
SWITZLD	352	783	1
POLAND	635	1,128	1
USSR	2,865	7,588	10
SPAIN	699	1,859	2
PORTUGL	146	547	
MALTA			
ITALY	837	2,483	3
YUGOSLV	968	2,172	3
ALBANIA	9	9	
GREECE	30	53	

Computers Tally USDA Trade Statistics

RUMANIA	335	891	1,029	1,463	1,520	1,525	1,529	1,529	1,529	1,529	1,529
TURKEY	269	1,143	1,518	1,956	2,486	2,723	3,069	3,297	3,479	3,552	3,648
CYPRUS							1	1	2	3	3
LEBANON	3	9	13	28	31	42	44	57	59	60	73
IRAQ	71	71	71	189	193	242	333	407	407	407	407
IRAN	381	607	826	1,126	1,567	1,852	1,927	2,002	2,227	2,245	2,591
ISRAEL	53	113	304	396	619	726	843	983	1,332	1,459	1,771
JORDCN			1	11	17	17	17	23	27	27	27
GAZA ST			5	5	5	5	5	5	5	5	5
KUWAIT	8	8	14	24	24	26	31	33	35	35	43
S ARAB	5	13	33	40	61	70	79	113	113	133	149
ARABIA				1	1	1	1	2	2	2	2
BAHRAIN		2	2	3	3	3	4	6	9	9	9
AFGHAN											
INDIA	586	3,073	4,601	5,090	7,414	12,026	13,587	14,354	14,645	17,060	17,498
PAKISTN	601	1,263	1,903	2,303	3,436	6,262	7,477	8,161	8,193	8,193	8,203
NEPAL		3	5	5	5	5	5	8	10	10	11
CEYLON							1	1	1	1	1
BURMA			2	2	16	22	23	26	28	28	28
THAILND	1	2	4	8	8	9	9	10	12	11	11
S VETNM		10	41	41	76	100	104	111	112	124	157
MALAYSA	1	1	3	3	5	5	7	7	7	8	8
SINGAPR	2	36	49	58	74	85	94	97	103	107	115
INDNSIA	42	42	42	63	65	65	65	67	68	69	69
PHIL R	138	385	600	848	961	1,163	1,378	1,690	1,849	2,144	2,476
KOR REP	276	413	1,388	1,787	2,381	2,896	3,744	4,413	4,753	5,071	5,479
HG KONG	13	76	108	182	229	246	267	302	506	705	780
TAIWAN	166	242	524	796	1,285	1,564	2,303	2,259	2,543	3,224	3,437
JAPAN	6,731	14,247	22,518	30,225	37,925	43,491	50,533	57,617	63,473	69,211	74,731
MAN IS	57	166	226	251	345	431	522	565	655	691	749
AUSTRAL	76	269	394	458	556	650	748	926	1,674	1,711	1,771
N ZEAL	66	128	218	255	323	359	408	528	595	674	749
BNP IS											
PR P IS	27	33	60	80	96	135	153	164	211	27	43

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Foreign Agricultural Service
U.S. DEPARTMENT OF AGRICULTURE

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FAS Tools Up To Enter th

"FASIMS"—the automated Foreign Agricultural Service Information Management System—is well along in its development program.

By RAYMOND E. VICKERY, *Director*
Office of Reports and Statistics, FAS

The Foreign Agricultural Service, ever mindful of its growing responsibilities—promoting dollar exports to world markets, managing special export programs, and collecting and publishing world agricultural information—is in the midst of reorganizing its time-honored statistical methods.

It is taking advantage of today's automatic data processing capabilities. Development of "FASIMS"—the Foreign Agricultural Service Information Management System—has been in progress since July 1, 1967. By September 1968 five ADP subsystems will be in operation; by January 1, 1969, another four. These nine subsystems are expected to cover our major needs for automating data.

FAS has long been a major collector of both current and historic information on world agricultural production and trade. Its statistical effort, one of the world's largest, funnels data from many sources—principally the 2,000 or so required reports from agricultural attachés overseas—to a broad range of users both within and outside the U.S. Government. These data have provided a firm base for the promotion of dollar agricultural exports and the special export-assistance programs through which the United States has been moving the bounty of its agriculture to less developed countries. Congress clearly spelled out the FAS statistical role in the Agricultural Act of 1954.[1]

Yet today's needs for agricultural and trade statistics, and those that can be foreseen for tomorrow, far outrun the slower manual methods that served FAS's statistical purpose in 1954, when U.S. farm exports totaled only $3 billion instead of $6.8 billion as they did last year. And today's bigger markets are highly competitive. This signals an urgent need for fast and accurate answers to a wide variety of questions

[1] "For the purpose of encouraging and promoting the marketing of agricultural products of the United States and assisting American farmers, processors, distributors, and exporters to adjust their operations and practices to meet world conditions, the Secretary of Agriculture shall acquire information regarding the competition and demand for United States agricultural products, the marketing and distribution of said products in foreign countries and shall be responsible for the interpretation and dissemination of such information in the United States and shall make investigations abroad regarding the factors affecting and influencing the exports of United States agricultural products."

er the Computer Age

about what is happening in world farm output, prices, and markets—and why.

Such answers are of crucial importance to the U.S. decision-makers—those responsible for planning and carrying out domestic policies on agriculture and trade. They are equally important to those whose livelihood depends on U.S. agriculture—farmers, processors, distributors, and exporters dealing in U.S. agricultural commodities.

Yesterday's manual recordkeeping methods do not suit today's urgent needs for fast statistical service.

The dual personality of FAS is reflected in its statistics. The basic "traditional" work of recording the worldwide figures on crop and livestock production and on trade has been done in the eight commodity divisions (Cotton; Dairy and Poultry; Fats and Oils; Fruits and Vegetables; Grain and Feeds; Livestock and Meat; Sugar and Tropical Products; and Tobacco). The "current" work of recordkeeping for the special government export programs has been done in the various program offices (P.L. 480, General Sales, Barter and Stockpiling, and Market Development.)

Each of the eight commodity divisions collects and processes many kinds of information about its commodities: exports and imports; production and current stocks; consumption and usage (industrial, animal, and human); prices, at various producer-to-consumer transaction points and geographic locations; tariffs, nontariff barriers, and trade policies; the general agricultural policies and activities of foreign governments and regional groupings such as the European Economic Community; present and possible shortages of each commodity in countries now participating in export programs or being studied for potential participation. All these data have had to be recorded by hand on worksheets, evaluated for reliability, and converted into standard units of measurement, before they can be made available to users.

The program offices collect, record, and publish information on the planning, signing, and carrying out of P.L. 480 and market development agreements and contracts; the operation of export programs and projects as measured against benchmarks and scheduled performance; shipments and arrivals of the various commodities exported under the programs; availabilities of strategic materials and services; expenditures by groups cooperating in market development; and compliance with all the legal requirements written into the various programs—from "usual marketings" (with which export programs must not interfere) to the use of American-flag vessels in specified percentages. These data, like those collected by the commodity divisions, are mostly recorded by hand, some of them more than once when they are needed by several offices in slightly different forms.

The various large collections of data thus maintained by FAS have two principal uses: in the day-to-day sharing of this information, through reports, publications, and answers to inquiries; and in decision-making—often at a high level and on very short notice.

Studies pointed out ways to update FAS statistical tools by use of modern automatic data processing.

FAS decision-makers, conscious of their need to detect and study any world development that will impinge on U.S. agricultural policies and programs or on the commodity markets for private trade, have long been aware of the need for better organization of the information FAS receives. No system of information management can cover every conceivable decision-making situation. Yet it should be possible, they felt, to tailor a system that would provide automatically the data needed for most of the routine FAS operations and decisions. This would free FAS experts to respond to heavy, unexpected requirements without upsetting or delaying the routine; it would also provide tools for complicated analysis in unusual situations.

These possibilities were pointed out in a study made in 1965 by Dr. Russell G. Thompson (Professor of Economics, University of Missouri) and another made in 1966 by the consulting firm Dunlap and Associates.

The Dunlap report, which became available in early 1967, made several specific recommendations. These follow:

- Develop a modern computer-supported Information Management System (FASIMS), with "subsystems" for the nine major types of information FAS deals with; centralize the processing of data by the use of ADP facilities and supporting personnel to the extent feasible, keeping in mind volume and frequency.
- Consolidate in the Office of Reports and Statistics (ORS) the responsibility for agricultural reporting as well as other sources of incoming data for the Information Management System (that office had been organized in January 1966 to provide leadership and direction for the agency's information management effort).
- Revise the instructions for agricultural attaché reporting into two sections—narrative and statistical—with standardization of the narrative part and preprinted forms for the statistical part.

In their study, Dunlap and Associates identified nine types of information that FAS collects and disseminates, the handling of which could and should be modernized by the use of the computer. The subsystems suggested for automation (except for that dealing with documents) are largely of the accounting type. They will accumulate "data banks" which are basic for developing more advanced subsystems later to aid in decision making.

The subsystems recommended, in the order in which they are being developed, are these: Document Identification and Retrieval; U.S. Trade (Export and Import); P.L. 480; Commodity Credit Corporation Credit Sales; Barter; World Trade; World Crop and Livestock Production; World Supply and Distribution; and Market Development.

On the FAS timetable, next January is the date for full-scale entry into the Computer Age.

FAS accepted Dunlap's recommendations, and ORS is now putting them into effect. An outside firm, Informatics, Inc., which specializes in the design and programing of ADP systems, has been working since July 1, 1967, to create the nine subsystems recommended by Dunlap. This 2-year effort is proceeding according to schedule.

The first system, *Document Identification and Retrieval*, became operational in March 1968. This system is designed to make available for easy use the narrative parts of the attaché reports, just as the data banks will make available the statistical parts. Each report is indexed by country and by commodity, and by certain topics of special interest to various FAS offices as well as the general public. Eventually, other types of documents may be included.

The next four subsystems (U.S. Trade, P.L. 480, Barter, and CCC Credit Sales) are nearing completion and expected to be wholly operational by September 1968.

The *U.S. Trade* system has for its primary source the tapes produced monthly by the Bureau of the Census in the Department of Commerce, showing U.S. exports and imports by country and commodity. FAS and other agencies of the Department of Agriculture have long used these data, but before ADP each office maintained its own hand-copied ledgers, and hours of work were required to handle each monthly "listing" from Census. Guided by the needs of the FAS divisions, ORS and Informatics, Inc., have developed formats which the computer can produce from the Census trade tapes. These can be produced in several combinations—for example, data may be printed out on a monthly, quarterly, semiannual, or annual basis; or, imports may be presented by source and exports by destination. Also, summaries may be produced for trading blocs such as EEC, or by commodity class.

An interim system developed by ORS is now being used with the older hand-kept ledgers to work the current figures in with the historical series. Eventually each commodity division will have historical data bases stored in the computer for use as and when needed, saving days of hand-copying and individual machine calculations.

The *P.L. 480* system is designed to support FAS's commodity export programs and its supervision of compliance with regulations issued to carry out the intent of the Law. Its data come from agreements, purchase authorizations, contracts, vessel approvals, bills of lading, and attaché reports of ship arrivals. ORS will be keypunching the information from these documents into IBM cards; the end result will be statistics available for current use by all offices involved as well as for several regular summary reports.

The *Barter* subsystem is designed primarily to support the contract monitoring and reporting functions of the Office of Barter and Stockpiling. It will also support the compliance reporting required by Title 10 of the FAS Regulations. Data to support the Barter Subsystem are derived from barter contracts, agent designation telegrams, price agreements, additionality approvals, invoices, export certifications, bills of lading, schedules of collections, notices of credit, and certificates of importation. The information from the data base will be used initially in 10 accounting and summary type reports.

The *CCC Export Credit Sales* system supports the short-term credit function of FAS. The primary sources of information here are the exporter's credit approval and the General Sales Manager's Export Record—Form 8R. From these, FAS will be able to produce the accounting and managerial-type reports needed to operate the program.

Streamlining the attache reports will help in the application of ADP to their processing and use.

The other four subsystems (*World Trade, World Crop and Livestock Production, World Supply and Distribution*, and *Market Development*) are in various stages of preparation; but ORS expects them all to be operational by the end of January 1969.

Crucial to the first three of these is the three-way conversation now being carried on between ORS, which knows the capabilities of ADP; the commodity divisions, which know the needs of decision makers; and the attachés, who know the wide variations in the amount and kind of data that can actually be obtained at the overseas posts. These three kinds of knowledge are being reconciled in a completely revised set of Attaché Reporting Instructions, under the supervision of ORS but through exhaustive consultations with each attaché and each commodity specialist.

The attaché reports are the lifeblood of the FAS information and program effort. The current instructions for them, however, have accrued over a number of years, with the result that they have become cumbersome and out-dated. Considerable standardization and streamlining is possible. This will not only reduce the workload of the individual attaché office in keeping with the need to economize on overseas expenses; it will make possible the much greater use of ADP methods in processing the attaché reports—and ADP should make possible the far more effective use of these reports in the United States.

Meanwhile, even in its earlier stages, the new FASIMS is providing ways for FAS commodity experts to make faster and more effective use of the basic data that are available. For example, specialists in several major commodities are already using the computer service in analyzing supply-demand relationships for countries where the United States has export programs or export potential.

Preview: France's Farm Prospects

This is the third article in a series (see the April 22 issue) that Foreign Agriculture *is publishing on supply-demand studies for agricultural products in key countries. Each study was conducted under contract between USDA and a country institution, using basic data from the country's source. Study trends may be more important than quantitative conclusions, and USDA does not always agree with production projections given.*

The report on which this article is based was prepared by the Center of Research and Documentation of Consumption (CREDOC) in Paris and contains projections of supply, domestic consumption, and net trade for grains and feedgrains, oilseeds, meat (including poultry) and meat products, dairy products, dry legumes, citrus, apples and pears, cotton, and tobacco.

Changes in the French farm industry over the past 15 years have disrupted old ways beyond the point of return in efforts to bring France to the forefront of today's agricultural world. Results thus far have been mixed. The supply-demand projection study conducted by CREDOC states, in summary, that comparable change is required in coming years if France is to achieve agricultural status satisfactory to its own goals. Through recent legislation and aids, the French Government is encouraging farmers to modernize farm techniques, consolidate their farms, and form cooperatives. On the other hand, surpluses of some commodities and oversupply of farm labor in some areas are among developments posing problems with no easy solution.

The overall view of the next 7 years shows continuing advances in production—in some cases, burdensome surpluses being the outstanding result. Milk, already a surplus commodity, is showing no halt in its upward production spiral. Output of soft wheat is expected to climb beyond market demand and influence both feedgrain and wheat trade. Imports of durum wheat and vegetable oils will continue their present upward trend. Also coming, according to CREDOC projections—self-sufficiency in pork, eggs, and poultry; near-to-permanent status as a net beef exporter; and growth in the French fruit industry.

These agricultural production, consumption, and trade patterns have substantial impact both on French demand for U.S. agricultural imports and competition with U.S. exports in other markets. In 1966 France spent $148.2 million on U.S. agricultural products and sold us products worth $73.3 million. Five areas are of particular importance to U.S. trade.

Prospects for grain

Wheat acreage is expected to remain constant through 1970 and 1975, as it has in the past 2 decades. A sharp increase in wheat acreage in northern France will probably be balanced by the substitution of barley for wheat elsewhere. Yields, however, are projected to increase 50 percent by 1975. This would bring the average yield to 52.8 bushels per acre, with output increasing comparably. Under these conditions, export supplies of soft wheat should hit 5 million metric tons in 1970 and 1975, a gain of 3.5 million over 1958-60.

However, domestic supply of durum wheat, which is increasingly in demand, will still be deficient. Imports are expected to reach almost 400,000 tons in 1970 and 410,000-485,000 in 1975. Lower yields of durums than soft wheat, nearly equal production costs, and a support price only 18 percent higher for durum than for soft wheat are factors expected to depress durum production. For durum wheat production to be profitable, soft wheat yields would have to drop by almost 6½ bushels from the 1958-60 average of 36.8 per acre.

Per capita consumption of wheat as bread and flour is forecast to decline, while intake of semolina (a durum wheat product used for the manufacture of spaghetti and noodles)

SUPPLY AND USE OF MAJOR AGRICULTURAL PRODUCTS, AVERAGE 1958-60; 1970 AND 1975 PROJECTED [1]

Item	1958-60	1970	1975
Grains:	*1,000 metric tons*	*1,000 metric tons*	*1,000 metric tons*
Wheat (excluding durum)			
Production	10,300	16,000	17,000
Consumption	8,800	11,100	12,000
Surplus	1,500	4,900	5,000
Exports	[2] 1,663	4,900	4,900
Feedgrains:			
Production	10,400	17,000	19,000
Consumption	10,300	14,900	17,700
Surplus	100	2,100	1,300
Exports	[2] 375	[3] 2,500	[3] 1,900
Imports	[2] 371	[4] 400	[4] 600
Total (wheat and feedgrains):			
Production	20,700	33,000	36,000
Consumption	19,100	26,000	29,800
Surplus	1,600	7,000	6,300
Net trade [5]	[2] +1,128	+7,000	+6,200
Durum wheat:			
Production [6]	45	75-135	80-155
Consumption	390	525	565
Net imports	345	390-450	410-485
Vegetable oils:			
Production [7]	70	120	120
Consumption	553	700-750	780-860
Imports [8]	483	630	740
Beef and veal:			
Production	1,367	2,050	2,270
Consumption	1,321	1,880	2,140
Exports [9]	46	170	90
Milk:			
Production	20,400	26,000	28,500
Consumption	20,100	25,000	27,000
Surplus:			
Milk	300	1,000	20,000
Butter	13	44	87
Skim milk	240	800	1,600

[1] Point projections are considered to be those most probable. [2] Figures taken from FAO Trade Yearbooks. [3] Barley. [4] Corn. [5] Exports (+); Imports (—). [6] Minus seeds and losses. [7] Oil equivalent of domestic oilseed production. [8] Includes oilseeds in oil equivalent. [9] Includes live animals in carcass meat equivalent.

Centre de Recherches et de Documentation sur la Consommation, *Production and Uses of Farm Products in France.*

Copies of the study may be obtained from the Division of Information, Office of Management Services, Department of Agriculture, Washington, D. C. With the exception of the references to 1966, all material contained in this article was drawn from the CREDOC report.

and durum wheat flour rises. This shift in demand means that more soft wheat will be available for export or feed.

Production of *feedgrains* in France—particularly of barley and corn—has gained remarkably in the past 2 decades. Increased yields for each grain, plus a shift to barley and corn from lower yielding rye and oats and from root crops like fodder beets and potatoes, have been instrumental in boosting production. Barley raising has been stimulated by the rapid rise in barley prices relative to wheat prices. The introduction of hybrids is responsible for the increase in corn production.

Area sown to both barley and corn should double the 1958-60 average by 1975, with expected barley acreage, at 7.4 million acres, twice that of corn. Barley output is expected to hit 10.5 million tons by 1975 or double the 1958-60 average, and corn production may triple to 6.3 million. These gains should make France almost self-sufficient in corn and provide an exportable surplus in barley of almost 2 million metric tons.

The quantity of grain used as feed in 1970 is expected to show a 70-percent increase over the 1958-60 average of 10.7 million metric tons and to double this average by 1975. Wheat and corn are expected to hold an increasing share in total feed consumption, although the exact composition of the feedgrain mix will be highly contingent on EEC grade policies. It is probable that the EEC will have to choose between exporting surplus wheat at a loss (and increasing feedgrain imports) and denaturing wheat to sell domestically at a loss as feedgrain. CREDOC considers the latter alternative more likely.

Forecasts for the percentage of wheat output consumed as feed show a rise from 21 percent in 1958-60 to 30 and 33 percent in 1970 and 1975, respectively. Total feed consumption is expected to increase considerably—rising 22 percent from the 1958-60 average of 70.2 million tons by 1970 and 27 percent by 1975.

The amount of grain available for export will increase substantially over that of 1958-60, reaching a level of 7 million tons in 1970, and then declining slightly between 1970 and 1975 to approximately 6.3 million tons. Feedgrain exports will equal about 20 percent of domestic production and break down roughly as three-fourths wheat and one-fourth feedgrains.

Livestock and dairy industry

Beef and *dairy* production poses serious structural problems for French agriculture, which will remain unsolved well into the 1970's. French farm structure makes a separation of beef and milk production practically impossible at present. The preponderance of dual-purpose breeds, the rather modest meat and milk yields, and the importance of calves and dairy cows in total slaughter highlight the difficulties confronting producers. Also, the many small French farms lack the capital necessary to convert to fulltime beef production, and the need of regular income generally encourages milk production rather than the meat production which is related to it.

Output of beef and veal is expected to increase by one-half to 2.05 million metric tons by 1970. The increase will be almost completely absorbed in the domestic market, as consumption is expected to rise by 41 percent in the same period. However, exports are expected and may exceed imports by 170,000 tons in 1970 and 130,000 in 1975.

Barring major structural change, there will be an appreciable milk surplus in 1970 and 1975, despite the probability of increased consumption and a 7- to-10-percent decline in price. In 1970 and 1975, respectively, France could face excess supplies amounting to 1 million and 20 million tons of milk, 800,000 and 1.6 million tons of skim milk, and 44,000 and 87,000 tons of butter.

France's milk surplus poses a more difficult problem than the oversupply of grain. Under present conditions, all Common Market countries produce too much milk, but only France will have an excess supply of grain. Also, of the EEC countries France has the best natural conditions for beef production, so of these countries, France, in particular, faces the challenge of restructuring agriculture to increase beef production and decrease milk output.

It is generally agreed that pork, eggs, and poultry production will meet domestic demand in the 1970's. Tentative production estimates for poultry production in 1975 range from 550,000 to 640,000 metric tons (dressed weight), almost twice the 319,000-ton average for 1958-60. Notable is the rapid change in the structure of the poultry industry since 1957: the share of industrial broilers in total production increased from 35 percent in 1961 to 60 percent in 1963.

Trade in oil, cotton, and fruit

The market for *vegetable oil* in France should provide considerable opening for foreign suppliers in the coming decade. In 1958-60 France imported 88 percent (1.2 million metric tons) of domestic requirements.

CREDOC expects that growing demand may lead to a 30-percent increase in imports through 1970 and a 60-percent increase through 1975.[1] However, the composition of the vegetable oil imports is expected to change. In 1958-60, 70 percent of vegetable oil imports were in seeds and beans and 25 percent in crude or refined oils. According to CREDOC's statement, as the output of crushing industries in Africa rises, there may be an increase in imports of oils from African countries. This, in turn, would cause declines in domestic crushing and increases in imports of oil meal.

France is entirely dependent on imports for its supply of raw *cotton*. Imports, in turn, are greatly influenced by the amount of manufactured cotton goods exported. And exports of cotton textiles are bound to decrease with the advance of textile industries in developing countries. Currently it seems likely that the French textile industry will continue to receive considerable protection from imported textiles. However, French cotton textile exports are expected to decline by 50 percent from 1958-60 to 30,000 metric tons in 1970. Exports should equal imports by 1975. Imports of raw cotton are projected at approximately 321,000 tons in 1970.

Fruit is a newcomer to the French export trade and one of rapidly growing importance. CREDOC expects that the present orchard structure should enable France to export about 100,000 metric tons of apples and perhaps 50,000 metric tons of pears by 1970—striking prospects in view of France's recent status as net importer of both fruits.

—LYNN S. BICKLEY
Foreign Regional Analysis Division, E.R.S.

[1] French production of rapeseed has expanded substantially since the study was made. Import prospects may therefore be less than indicated in the study.

Availability of fats improves

Indian Farmers Reap Record Oilseed Crop

India anticipates a record oilseed production in 1967-68, bringing with it increased production of vegetable oils and improved per capita availability of edible fats. Following early reports of large crops, prices of oilseeds and their products declined gradually during the second half of 1967 and continued moving downward early this year. Effects on trade will not be particularly dramatic although export prospects have brightened a little and imports may be down some.

Production of oil-bearing materials, including coconuts in terms of copra, is estimated unofficially at 11.6 million metric tons for the 1967-68 season, compared with 9.2 million in 1966-67 and a previous record of 11.3 million in 1964-65. In contrast to the past two seasons, when drought and unseasonal weather hindered both growing and harvesting, this year rains fell at the right time in most growing areas and contributed largely to the bumper outturn. Were it not for unseasonal early-spring weather in a few parts of the country, production might have reached the early 1968 estimate of 12 million tons.

Record peanut crop

Output of peanuts, India's most important oilseed since it is expected to account for 60 percent of the vegetable oil produced in 1967-68, is still estimated unofficially at a record 6.3 million metric tons (in shell), against the previous year's 4.5 million (see *Foreign Agriculture*, Feb. 26, 1968). Some 18.6 million acres yielded 747 pounds per acre, a record for India but low when compared with other major producing countries.

Another 29 percent of India's vegetable oil production this year is expected to come from four other oilseeds—rape and mustard (planted together), sesame, flaxseed, and castorseed. In aggregate, output of these is placed at 2.33 million tons, against 2.00 million in 1966-67. Rape and mustard production is now estimated unofficially at 1.35 million tons, down from an earlier estimate of 1.5 million. Some 7.7 million acres yielded 387 pounds per acre, more than last year but down considerably from the 1964-65 level of 454 pounds. Likewise, the flaxseed estimate has been reduced from 450,000 to 400,000 tons, with a yield of 210 pounds per acre from 4.2 million acres. This year's castorseed crop is particularly large. Unofficially estimated at 130,000 tons, some say it could reach 150,000. Planted area was up 1.1 million acres, and yields averaged 261 pounds, a record for Indian castorseed. Sesame output is estimated at 450,000 tons; yield was 146 pounds per acre from 6.8 million acres.

Coconuts, cottonseed

Coconuts and cottonseed probably will account for the remaining 8 and 3 percent, respectively, of the vegetable oil produced in 1967-68. According to preliminary figures from the Director of Coconut Development, output of coconuts, in terms of copra, this year will total about 765,000 tons, a little more than last year's. Plantations are concentrated in the State of Kerala, which provided some 70 percent of India's production in 1966. Here, the area in coconuts has increased very little over the last few years, because of heavy competition for land, and is estimated at about 2.1 million acres.

Cottonseed production, on the basis of commercial estimates of lint cotton, will total around 2.2 million tons in 1967-68, against 2.0 million in each of the last two seasons. Unofficial estimates place this season's yield at a record 243 pounds per acre from 20.3 million acres. With plans afoot to increase the acreage in cotton, availabilities of cottonseed to the Indian crushing industry are expected to rise. Only about 25 percent of this season's cottonseed production is expected to be crushed.

Thanks to the record oilseed crop, total production of vegetable oils in 1967-68 is expected to rise to almost 2.5 million tons from about 2.0 million in 1966-67. Output of oil from peanuts, mustard and rape, sesame, flaxseed, and castorseed is estimated at 2.2 million tons, up about 31 percent from last season's level. Production of peanut oil alone is up some 40 percent to about 1.5 million tons. Coconut oil production is estimated at the 1966-67 level of 198,000 tons. Copra imports will be smaller, but more oil will be crushed from domestically produced copra. Cottonseed oil output is expected to equal the 80,000 tons produced during the past two seasons.

This increase in oil production, combined with estimated output of 560,000 tons of butter and ghee (semifluid butter), brings total production of oils and fats in India this season to 3,042,000 metric tons, 21 percent above last season's. On a per capita basis, availability of edible oils including butter and ghee—after accounting for imports and exports—is estimated at 12.3 pounds, against 10.7 in 1966-67, and that of inedible oils at 0.59 pound, against 0.49. Although this shows an improvement over 1966-67, per capita availabilities are not up to the 1964-65 levels because population has increased faster than oil production.

Softening effect on prices

Prices of oilseeds and their products declined gradually during the latter half of 1967 although for the entire year they averaged higher than in 1966. During the first half of the year, prices held fairly steady at the high January levels. Ordinarily after two consecutive small crops, they would have been higher during this period, but several factors—including the tight money position and arrival of U.S. P.L. 480 oils—held them in check. Prices began declining in June after satisfactory monsoon rains and fell even further after prospects for the record peanut crop became evident in November.

This year, prices held fairly steady during January, then broke as the bulk of the new peanut crop hit the market. However, by April they were rising again with the end of peanut marketing and reports of lower-than-expected winter seed crops. The trade expects prices to firm up during May and June, with no declines until the new season starts.

Imports of oilseeds declined to 30,894 tons in calendar year 1967 from 40,135 tons the year before primarily because of lower purchases of copra. Among vegetable oils, smaller takings of palm oil were insufficient to offset bigger ones of soybean oil, and total imports were up to 60,243 tons from 44,434 in 1966. Most of the oil—almost 51,600 tons—

was U.S. soybean imported under P.L. 480. Imports for 1968 are difficult to predict at this time; however, they could very likely be below the 1967 level since no foreign exchange allocations have been made for copra and palm oil imports, and takings of P.L. 480 soybean oil are uncertain at present.

Exports last year, in the face of the continued ban on shipments of oilseeds and edible oils, were hardly changed from the 1966 level. Comprised mostly of cakes and meals, they were valued at $63.9 million, against $63.1 million in 1966. Despite the government's decision last October to permit exports of hand picked select peanuts up to an undisclosed ceiling presumed to be 50,000 tons, shipments for the year totaled only 190 tons. Castor oil exports were up to 2,458 tons from 617 in 1966, with 61 percent moving to the Soviet Union. Total cake and meal shipments dropped to 737,000 tons from 819,000.

This year, exports are expected to improve. Shipments of peanuts will probably fall short of government expectations and may total only 20,000 tons. Castor oil exports are estimated at 25,000 tons, but could very well be higher. Among meals, exports of peanut meal are expected to rise to 800,000 tons, and the trade expects a big increase —to 40,000 tons—in shipments of linseed extractions. Cottonseed cake and meal exports are expected to decline to 80,000 tons, while shipments of other cakes and meals are being gaged at about the 1967 level.

—Dispatch from Ross L. PACKARD
U.S. Agricultural Officer, Bombay

Six Countries and World Bank Agree To Finance Dam Project in Pakistan

Six nations and the International Bank for Reconstruction and Development (World Bank) recently signed an agreement setting up the Tarbela Development Fund, which will provide nearly $500 million toward financing the world's largest earth and rockfill dam on the Indus River in West Pakistan. The six include Canada, France, Italy, Pakistan, the United Kingdom, and the United States.

Slated for completion in early 1976, the Tarbela project is a major step in wide-scale plans to harness the Indus and its two western tributaries, the Jhelem and the Chenab, for irrigation water and electric power. These waters were awarded to Pakistan in 1960 under the Indus Waters Treaty.

(This treaty ended a long dispute between India and Pakistan over use of the Indus and its main tributaries. Under the treaty, Pakistan received the Indus and the western tributaries, while India was allocated the three eastern tributaries —the Ravi, the Beas, and the Sutlej. This decision released the entire flow of the eastern tributaries for irrigation development in India but required that Pakistan construct works to transfer waters from the Indus, Jhelem, and Chenab to irrigation areas previously served by the waters awarded to India. To build these works, the World Bank and seven countries—Australia, Canada, West Germany, New Zealand, Pakistan, the United Kingdom, and the United States—pledged substantial funds through the Indus Basin Development Fund Agreement in 1960 and a supplemental agreement in 1964. India also contributed funds through the Waters Treaty.)

The Tarbela Dam will supplement a huge complex of works already under construction—some of it well advanced. Along with the Mangla Dam on the Jhelem, opened last November, it will for the first time provide water during the dry season for West Pakistan's irrigation system, which covers 33 million acres and is the largest single integrated system in the world. Waters stored during the summer flood season, when the Indus discharges much more water than could be used for irrigation even with an expanded canal system, will be released during the winter season, when the main food crops are grown but river flows are low and variable.

Although agriculture will benefit most from the Tarbela project, the dam will also provide considerable power. The design calls for 12 turbine generators, each rated at 175 megawatts. If they are installed as planned between 1975 and 1980, West Pakistan can look to Tarbela for more than a quarter of its total electric energy requirements during 1975-80.

The dam site is located on the Indus River some 40 miles northwest of Rawalpindi. Some 9,000 feet long at its crest and 485 feet high, the main structure will be flanked by two auxiliary embankments on the left abutment.

New Zealand Wool Commission Changes Its Disposal Policy

A limited amount of wool from the government stockpile of 1966-67 purchases, which amounted to 645,786 tons, will be placed in auctions during the 1968-69 season, according to the New Zealand Wool Commission. The new season will begin with opening winter sales during July and August of 1968.

In announcing the change of policy[1] from that in force during the current 1967-68 season, Chairman E. L. Greensmith of the Commission stated that, in the opinion of the Commission, it would be possible to offer up to 100,000 bales in the roster of auction sales during the early part of the main selling season.

Chairman Greensmith commented, "At most no more than 100,000 bales will be offered before Christmas. New Zealand wools are in short supply during that period and such a quantity can be readily fitted into the sales roster. There will be no dumping."

In addition to the unsold stock from the 1966-67 season, 57,152 bales have been added to the stockpile from the current auction season. This season the Commission departed from its fixed-price floor-purchasing function to that of making deficiency payments to growers for sales below the established minimum price. Purchases of the additional wool were made when bids taken in auction failed to reach the floor price, which was reduced this year to about US$0.18 per pound.

Initial reaction to the new policy ranged from editorial commendation to strong condemnation from some spokesmen for sheep producers. However most of the objection came from local organization spokesmen rather than from the national offices of producers or traders.

On balance it appears that the majority of those interested in the wool trade believe the action of the Commission to be correct.

—Based on dispatch from
W. GORDON LOVELESS
U.S. Agricultural Attaché, Wellington

[1] For 1967-68 the Commission has had a policy of not selling its wool at less than purchase cost.

Inter-American Bank Stresses Agricultural Loans

Last year the Inter-American Development Bank (IDB) again made record contributions to the economic and social development of Latin America, according to the Bank's 1967 Annual Report released last month.

During the year the Bank increased the flow of external resources for the national development programs of its member countries within the framework of the Alliance for Progress. It also stepped up its efforts to speed Latin America's economic integration. This action was in line with decisions adopted by the Presidents of America in Punta del Este, April 14, 1967, calling for the progressive creation of a Latin American common market beginning in 1970.

In 1967 the Bank lent $496.4 million compared with $396.1 million in 1966. Its disbursements, earnings, and loan repayments also exceeded all previous yearly totals. The year's loan commitments brought the Bank's net cumulative total to 448 loans amounting to almost $2.4 billion. This $2.4 billion is helping to finance development projects whose total cost is nearly $6.4 billion. The remainder (62 percent) of the cost of the projects is coming primarily from the Latin American member countries themselves.

As in previous years, the Bank's lending policy in 1967 supported the balanced development of its Latin American member countries. Under this criterion, agriculture was given special stress. Loans amounting to $153.7 million—over 30 percent of the total—went to agriculture.

On a cumulative basis also, agriculture is the leading lending sector. Of the Bank's cumulative lending of $2.4 billion, distribution has been as follows: Agriculture, $578.3 million; industry and mining, $487.8 million; economic infrastructure, $468.2 million; water supply and sewage systems, $394.5 million; housing, $287.6 million; education, $101.6 million; preinvestment, $52.3 million; and export financing, $19.7 million.

Development loans

Among the specific accomplishments that IDB loans are helping to bring about are—

- Improvement of some 5.9 million acres of farmland and extension of 487,000 agricultural credits to farmers.
- Expansion of electric power capacity by 4.5 million kilowatts.
- Construction or improvement of 2,000 miles of main highways and nearly 10,000 miles of access roads.
- Construction or expansion of nearly 3,000 rural and urban water supply systems which benefit about 40 million people.
- Construction of more than 300,000 housing units for low-income families.
- Improvement of 120 centers of learning, with emphasis on institutional development and teaching of basic sciences.

Economic integration

A total of $84 million in loans was authorized by the Bank in 1967 to foster Latin America's economic integration. These included loans to—

- The Central American Bank for Economic Integration to finance infrastructure and industrial projects in Central America.
- Honduras for highways to improve communications with its neighbors.
- Argentina for highways to improve its land links with Chile, Bolivia, Paraguay, and Brazil.
- Paraguay to expand the Acaray hydro-electric plant, which will provide power to Paraguay, Brazil, and Argentina.
- Brazil to help finance exports of capital goods to other Latin America members of the Bank.

The Bank also launched various studies in 1967 basic to the area's integration. Loans for these studies came from a separate Pre-investment Fund for Latin America's Integration established in 1966. They were in the fields of regional telecommunications and transportation requirements, frontier area development in the Colombia-Ecuador and Argentina-Chile border zones, integration of air-freight services in the region, and joint development of the River Plate basin—a 1.2-million-square-mile area taking in parts of Argentina, Brazil, Bolivia, Paraguay, and Uruguay.

Ireland Announces New Farm Supports

New support measures for Irish agriculture were announced on April 23 by Minister for Finance Charles J. Haughey in his Budget Statement in the Dail Eireann (lower House of Parliament). The measures include higher support prices for finished hogs of top quality, increased grants for piggeries, an increase in the mountain lamb subsidy, a floor price for oats, and further tax rebates to small farmers.

The new guaranteed minimum prices for certain bacon-type hogs were effective April 29. Prices for Grade A Special and Grade A hogs were increased $1.44 per 112 pounds deadweight. Prices for Grade BI and L hogs were increased $1.08 and $2.52 per 112 pounds deadweight. These minimum prices are those payable by bacon factories. Currently hog prices in Ireland are slightly above the new support level.

In June, a special farrowed-sow-grant scheme for farmers in the 12 western counties will be introduced. The grant of $24.00 payable in two installments is designed to encourage farmers in these poorer areas to keep sows and increase hog output.

Also, a new scheme of grants is to be introduced for large-scale hog-fattening units.

The rate of subsidy paid on mountain lambs is to be increased from $1.20 to $2.40 per head. Beginning with the 1968 oats crop there will be a floor price for clean oats of good feeding quality. It is expected that the guaranteed price for green oats will be $54 per long ton.

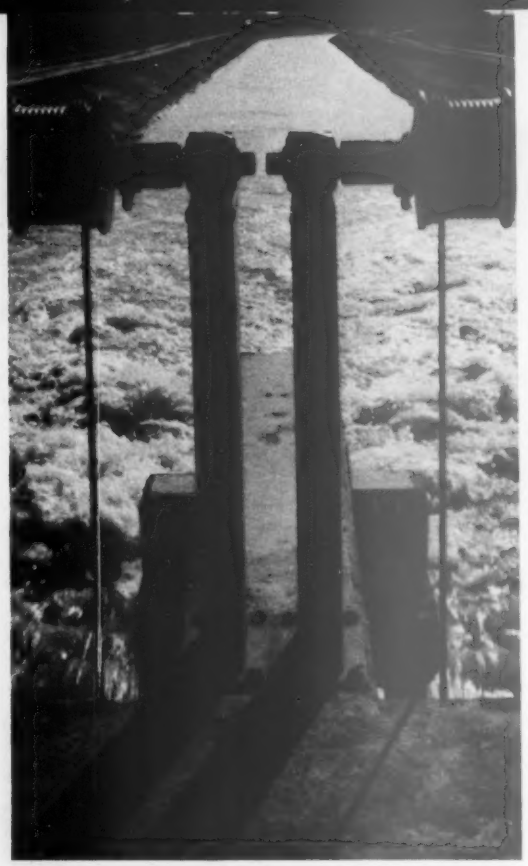
—Based on dispatch from
EUGENE T. RANSOM
U.S. Agricultural Attaché, Dublin

Holsteins to Germany

Fifteen U.S. Registered Holstein calves were shipped to West Germany recently for use in research comparing their beefing qualities and rates of gain with those of Holstein cattle native to that country.

So far, the project has involved only cattle sired by U.S. and Canadian bulls. Information compiled to date shows that on both counts these cattle are comparable to the native German cattle, even though the North American ones are bred for dairy purposes.

With comparable beefing qualities and superior dairy qualities, U.S. Registered Holsteins may find a market in West Germany, where, as in other European countries, the same cattle are used for both purposes.



Top right, view of locks that will help divert water to new areas in Khuzistan. Top left, canals like this move water to plots of sorghum (below).

Agriculture Moves Up in

By C. S. STEPHANIDES
U.S. Agricultural Attaché, Tehran

Nourished by water from the giant Mohammed Reza Pahlevi Dam, agriculture in Iran's Khuzistan Province is slowly coming to life after seven centuries of dormancy. Benefiting the most is sugar, production of which has increased sharply over the last few years. Cotton, grains, vegetables, fruit, and livestock will eventually be produced here on a large scale also. (See *Foreign Agriculture*, July 13, 1964.)

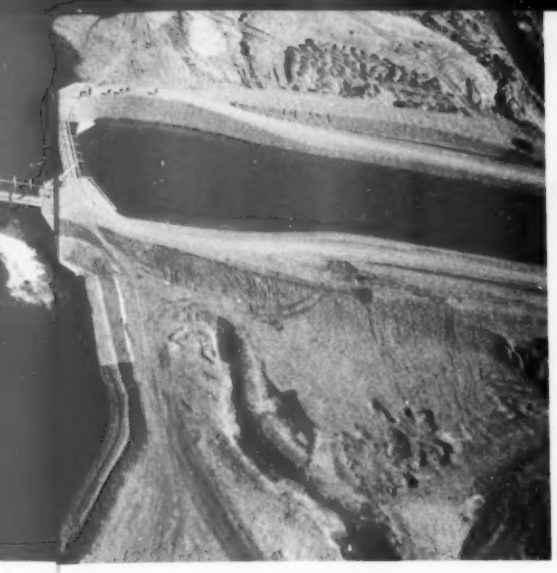
Once Khuzistan was the farming center of the Persian Empire, but the complex irrigation system of early times was left to decay, and agricultural production ceased. Today, another irrigation system has been started that will restore to the Province its bygone prominence as an agricultural producer. This far-reaching project includes a total of 15 dams on the region's five rivers. When finally harnessed, these rivers will irrigate over 2.5 million acres of land and generate 6 million kilowatts of hydroelectric power yearly.

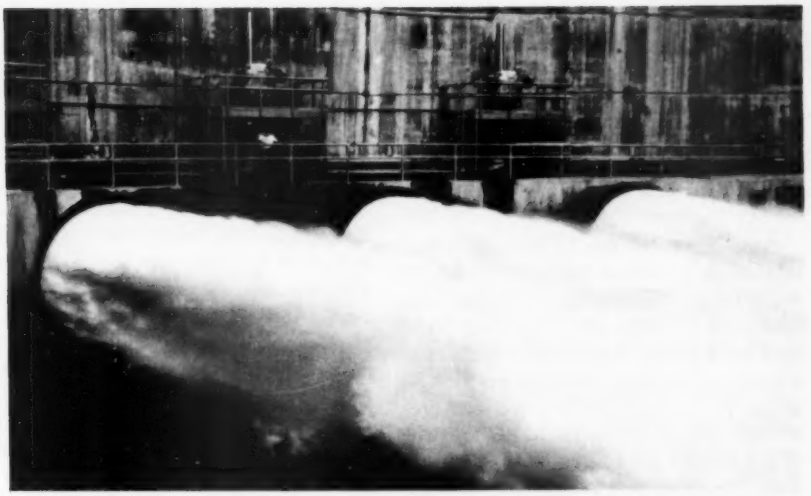
Pahlevi Dam a beginning

First step in this direction was completion in 1963 of the Mohammed Reza Pahlevi Dam on the Dez River. At 665 feet in height, the Pahlevi Dam is the highest dam in the Middle East. It can hold 3.3 billion cubic meters of stored water and is geared to irrigate 312,500 acres of land the year round.

So far the Government of Iran has used 55,000 of these acres to carry on large-scale testing of crops and production methods. It has found that the region's mild winters make possible the growing of two to three crops yearly, and yields in most cases are well above the average for Iran and the United States as well. For example, the area has recorded yields of 33-40 bushels of soybeans per acre compared with a 1964-66 average in the United States of 24 (most of this is on unirrigated land). Those of barley have been reported at 62.5 bushels (33.8 for the United States); oats, 75 bushels (43.9); and wheat, 63.3 bushels (25.2).

Although no production records have been kept on vege-





Up in Khuzistan

Above, man at rail is dwarfed by water gushing out of Pahlevi Dam. Below, men at work on irrigation system for sugarcane—the major crop now produced in Khuzistan.

tables, tests show that they do very well also. In fact, the warm climate of the area makes possible the early production of both vegetables and fruit—especially strawberries, which command good prices on the Tehran market and other large markets in the country.

Most spectacular agricultural achievement in Khuzistan, however, has been the establishment of sugarcane cultivation at Haft-Tappeh. Production at Haft-Tappeh during 1967 was 42,500 metric tons of refined sugar, compared with 12,000 in 1961-62, when the first commercial crop was produced. Goal of the sugar company is to increase cane sugar area to 25,000 acres—from the current cultivated area of about 7,500 acres—for a production of about 100,000 tons of refined sugar. This will enable Iran to cut back significantly foreign purchases of sugar—one of its leading agricultural imports.

Currently, irrigation of the sugarcane is costly since water has to be pumped from the Dez River. However, by 1970, the canal construction project will have brought water to the sugarcane plantation. Thus, irrigation by gravitation will eliminate the costly pumping and reduce the cost of production.

In addition to producing sugar, the plantation is making good use of the sugar byproducts. More than 16,000 tons of molasses are exported, and with the development of a livestock industry in the near future, this molasses could be used at home as feed. Also, the company is now setting up a papermill to use some of the byproducts.

Large-scale farming encouraged

In developing Khuzistan, the Iranian Government is stressing modern production methods on large tracts of land. Thus, the Ministry of Water and Power is prepared to lease at low cost government-controlled land in blocks of 1,000 acres or more to reliable, experienced Iranian and foreign corporations or individuals.

The desire of the government to make this type of venture successful was exhibited recently when 17 U.S. agribusinessmen toured the area to study resources, soil fertility, topography, transportation facilities, and other factors in crop production. The Iranian Government prepared a well-balanced program for these visitors, calling on leading technicians to provide all essential information to the group. Moreover, at two different times, the Prime Minister and his ministers met with the group, and the Prime Minister asked the men to propose their own terms of working in Iran.

With interest from such groups, plus increasing availability of water and power the year round, prospects are excellent for achieving the goals for agriculture in Khuzistan. The successful operation of the Dez Project will open the road to a faster completion of the 14 additional dams to be built in coming years. And perhaps one day Khuzistan will have an agriculture to outshine that of its past.

To support livestock development

U.S. Herefords Arrive at Chilean Ranches

By WALDO S. ROWAN
U.S. Agricultural Attaché, Santiago

Some 3,540 of the 5,150-head record sale of U.S. Polled Hereford cattle to the Chilean Government late last year have already been delivered, and most have been resold to ranches in the southernmost Province, Magallanes. With plenty of land suitable for livestock production, this Province could become one of the world's greatest cattle regions, and both government and industry are engaged in efforts to tap its potential.

In view of this anticipated development, it is expected that cattle sales to this area will increase substantially and may exceed 10,000 head during the next 2 to 3 years.

The number of cattle delivered so far—mostly heifers aged 8 to 12 months—is about double any previous single foreign sale made by the United States. Shipment of the rest is scheduled for sometime this summer.

Financed by a $2 million AID loan, the sale resulted from a joint effort by the American Polled Hereford Association, FAS, and Chilean government and business officials (see *Foreign Agriculture*, Dec. 18, 1967). The Livestock Division of Chile's National Development Corporation (CORFO) acted as purchasing and importing agency and agreed to extend credit for 6 years at 7 percent interest to local farmers interested in buying the cattle. CORFO also granted a subsidy of $80 per head on the first 200 head sold.

A CORFO veterinarian, Dr. Raúl Foretic, accompanied Dr. Jorge Gastó of the Chilean Ministry of Agriculture to the United States to select the cattle.

Aims to increase output

The importation of cattle and extension of credit are only part of CORFO's Plan Ganadero (Livestock Plan) to help livestock producers increase and improve their herds. This organization also helps farmers build or remodel barns and silos, purchase equipment, improve and develop pasture, and make other improvements that will stimulate livestock production.

Increased livestock output is a high-priority aim of the Government of Chile, where consumer demand has resulted in costly imports of beef and slaughter animals. According to the Empresa de Comercio Agrícola (ECA), Chile's agency responsible for importing most foodstuffs, beef and slaughter cattle imports reached an all-time high of $35.5 million in 1964—a big drain on foreign exchange.

To reduce these imports and encourage consumption of other meats, the government in July 1965 imposed restrictions limiting the sale of beef and veal in stores to Friday and Saturday and their sale in restaurants to Friday, Saturday, and Sunday. These restrictions, ECA says, reduced imports to $28.3 million in 1965, $27.5 million in 1966, and $21.6 million in 1967.

The decline in beef and cattle imports was more than offset by increases in domestic production of pork, poultry and fish. The government hopes to reduce further—and possibly even eliminate—beef imports through continued development of livestock production and has raised meat prices to encourage farmers to support this effort.

Focus on Magallanes Province

The region that may someday make Chile self-sufficient in beef is its southernmost Province, Magallanes, hailed by many as the world's last great cattle frontier. Returning from a recent trip to this Province, a U.S. cattle rancher who has visited nearly every major cattle producing area in the world called Magallanes potentially one of the greatest. He said he had never seen finer looking cattle fed only on pasture of native grass.

Magallanes has an area of 32.5 million acres, of which about 18.5 million are

Left, the cattle are unloaded directly onto a cattle truck at Chile's port of Punta Arenas; below, they are released on pastureland in Magallanes.

suitable for livestock production. Today, only 10 million are being used for any type of grazing, and most of this is in native or unimproved pasture for sheep production.

Technicians in the Province claim that improved pastures (without the use of fertilizer) have a carrying capacity of one to two animals per acre, compared with one animal on eight acres of cleared natural pastures. They add that since snows are not excessive, cattle can be maintained on pastures throughout the year with no supplemental feeding except during infrequent periods of "icing over." Alfalfa is being developed in the area as a source of supplemental winter feed when needed.

The Province is reportedly free of aftosa, and the Chilean Government will permit imports only from aftosa-free countries—the United States, Canada, Australia, and New Zealand. The livestock population is currently estimated at about 50,000 head of cattle, including the recent shipment from the United States; 2.8 million head of sheep; 4,800 head of swine; and 14,500 horses.

Potential barely tapped

Looking at the potential of the Province, the surface has scarcely been scratched. If only one-tenth of the area suited for livestock production were developed with improved grasses and clover, Magallanes' carrying capacity would be at least 1 million head of cattle, about one-third of Chile's estimated total cattle population of 3.1 million head in 1967, without substantially reducing the number of sheep in the Province.

The leader in developing cattle production in Magallanes is the Ganadera Tierra del Fuego, a large corporate farm which at one time had an all-sheep operation. For the past 10 years this farm has been experimenting with cattle and has demonstrated that they do exceptionally well on improved pastures. The farm's cattle population increased from about 6,000 to some 10,000 head during the past 5 years.

Ganadera Tierra del Fuego vigorously promoted the purchase of the U.S. Polled Herefords and assured CORFO of a market for all the cattle imported into the Province. Of those that have already arrived, the farm purchased 1,000 head.

Ganadera Tierra del Fuego owns about 2,430,000 acres of land in Magallanes, of which 296,000 had been cleared as of June 1967 and 247,000 planted with improved pastures. Current plans call for clearing and developing improved pastures on 25,000 acres annually for the next few years. In October 1965 the Ministry of Agriculture declared the farm Cooperadora del Plan Ganadero (Cooperator of the Livestock Development Plan). As a result, Chile's Agrarian Reform Corporation (CORA) has agreed not to expropriate improved properties up to a maximum of 1,215,000 acres or 50 percent of the farm's holdings for a period of 20 years.

While the realization of Magallanes' maximum potential in livestock production undoubtedly lies many years in the future, plans are underway and progress is being made. The combination of freedom from disease, potential productivity of the land, and aggressive business enterprise with government support and assistance should go a long way toward developing this Province into one of the world's major livestock producing regions.

Right, Polled Hereford bull gets his first look at Chile as he emerges from ship; the number on his eartag corresponds to that on his tests for tuberculosis, brucellosis, and other diseases. Below right, herd settles down on Chilean ranch.

The Sweet Success of American Lemons in Japan

Fresh lemons are becoming a popular new fruit in Japan to the cheers of California and Arizona growers, who are selling the country more than a million and a half cartons a year. Lemon sales to Japan skyrocketed last year to more than eight times the 1964 level for the two-State industry, whose only competition in Japan is an 8,000-ton-a-year domestic crop.

But the picture has not always been so rosy. Prior to 1964, strict quota regulations allowed only small quantities of imported lemons to move into Japan; these generally went to institutional users. The California-Arizona Citrus League (CACL) represented the growers in a 3-year effort toward removal of the restrictions. Because of the League's persistence and the U.S. Government's strong support, Japan finally lifted the quota. Prices came down and sales started climbing. Lemons moving for 25¢ to 30¢ each began selling three for a quarter.

With the fruit in a good consumer price range and unlimited imports allowed, CACL and the Foreign Agricultural Service launched a full-scale promotion campaign. Lemons were introduced as a unique item, not a substitute product, useful as food and as a beauty aid.

Few housewives had seen a lemon and even fewer know how to use one, so consumer education was the strongest early pitch. Recipes were drawn up using lemons on fish—predominant in the Japanese diet—in tea, and as a garnish and dressing for salads. Housewives were urged to try grated lemon peel and juice as new food flavorings. Advertising also stressed the value of lemon juice as a hair rinse and skin cleanser and the importance of lemons' Vitamins C and P for personal health.

Television programs, women's magazines, and department stores demonstrations carried the message to young urban housewives, the chief target. Radios ran lemon jingles and colorful brochures went to women's organizations and cooking schools.

By 1966-67 export sales had reached 1,660,000 cartons—70 percent of them going to the major cities of Osaka and Tokyo. During 1967 and 1968 promotion efforts have concentrated on introducing lemons to smaller population centers all over Japan.

Left, one illustration in a full-color booklet from the California-Arizona Citrus League to introduce the Japanese to various ways of using lemons in their daily diets. Text and recipes are printed in Japanese. Below, the citrus booth at USDA's American Festival in Japan. Lemons were one of the most popular fruits sold at the April show.

New Import Licensing Plan in New Zealand

New Zealand has removed the licensing requirement for several categories of agricultural products, according to its schedule for 1968-69 (July-June). Those of most interest to U.S. exporters will be edible nuts and rice, sold in bulk.

Almonds, walnuts, and Virginia peanuts seem to offer opportunities for selling in New Zealand; and recurring shortages of long grain rice, for which there is a growing demand, may stimulate trade in this product. Except for walnuts ($2.32 per 100 lb.), there is no duty on edible nuts or rice.

For most items, the import licensing schedule indicates a percentage allocation based either on licenses issued or on actual imports during the preceding year. Basic allocations for 1968-69 will generally be 115 percent of those for 1967-68, which may or may not be a liberalization, depending on licenses for individual commodities issued during 1967-68.

The schedule also classifies some commodities as "C" items, for which the government will consider applications for import licenses individually, and others as "D" items, for which the government will consider license applications only in the most exceptional circumstances. Apart from licensing, New Zealand protects domestic production through state trading, mixing regulations, and quarantine regulations.

CROPS AND MARKETS SHORTS

Weekly Report on Rotterdam Grain Prices

Between May 14 and May 21, 1968, there was very little change in the offer prices of wheat in Rotterdam. Manitoba and U.S. Soft Red Winter increased 1 cent. All others remained unchanged.

U.S. and Argentine corn decreased 1 cent while South African corn increased 1 cent.

A listing of the prices follows.

Item	May 21	May 14	A year ago
	Dol.	*Dol.*	*Dol.*
Wheat:	*per bu.*	*per bu.*	*per bu.*
Canadian No. 2 Manitoba	2.01	1.99	2.17
USSR 121	1.88	1.88	(1)
U.S. No. 2 Dark Northern Spring, 14 percent	1.91	1.91	2.09
U.S. No. 2 Hard Winter, 12 percent	(1)	(1)	1.99
Argentine	1.88	1.88	2.00
U.S. No. 2 Soft Red Winter	1.60	1.59	1.84
Corn:			
U.S. No. 3 Yellow	1.34	1.35	1.51
Argentine Plate	1.46	1.47	1.49
South African White	1.50	1.49	1.58

[1] Not quoted.

Note: All quoted c.i.f. Rotterdam and for 30- to 60-day delivery.

Mozambique Aims To Consume More Corn

Mozambique produced a surplus of corn the past 2 years and has recently acted to include corn flour in its bread formulas.

Bumper corn harvests in 1966 and 1967 enabled Mozambique to become a net exporter of corn. Exports from the 2-year surplus have totaled 88,000 tons to date. And, while there was considerable damage by drought to this year's corn crop in some central and southern districts, it now appears that another sizable surplus may become available for export in 1968-69.

In order to divert more corn to local consumption, the government has announced that it will promulgate legislation to require the incorporation of 10 percent of corn flour in all bread manufactured in the Province.

Wheat needs in Mozambique currently approximate 60,000 metric tons annually, practically all of which is imported. Local production in the past 5 years has varied between 8,000 and 13,000 tons. The balance of the requirements are imported. In calendar 1966, Mozambique imported a total of 50,557 tons of wheat—something over three-quarters from Australia and the remainder from Argentina.

Argentine Cotton Crop Down Sharply

The first official Argentine cotton production estimate in 1967-68 (August-July) is around 320,000 bales (480 lb. net), much lower than earlier estimates by trade. This compares with 400,000 bales produced in 1966-67 and the record high of 783,000 10 years ago. The sharp drop stems primarily from damage by dry weather in January and February. Harvested acres placed at 720,000 acres are also down from 815,000 acres a year earlier. The smaller area is chiefly a result of farmers diverting acres to other crops. In the Chaco region, the major cotton producing region, a substantial number of acres was diverted to wheat.

Consumption in 1967-68 is estimated at about 450,000 bales, a significant reduction from the previous year. Competition from other fibers and the depressed textile market can be credited with much of the reduction. The difference between consumption and production is expected to come from stocks.

Cotton stocks on August 1, 1967, are estimated at 470,000 bales, which are sufficient to carry domestic needs for about a year. Argentina exports cotton, mostly lower qualities that are not needed by the domestic mills, to Japan, Belgium, Hong Kong, France, and the United Kingdom. Exports in 1967-68 are estimated at 50,000 bales, down from 127,000 a year earlier. Cotton imports, primarily longer staple varieties from Peru, amounted to 49,000 in 1966-67, down from 71,000 the previous year. Imports in 1967-68 are not expected to exceed the 1966-67 level.

Canadian Lard and Tallow Output High

Canadian production of lard and tallow reached high levels in 1967 as a result of near-record slaughterings of hogs and cattle. Since slaughterings are expected to be even larger this year, production of these two animal fats will most likely increase further.

Output of lard was up by 22 million pounds to a total of 136 million. With the increase in supply, prices dropped to 8.6 cents per pound by January 1968 from 12.1 cents the previous January. As a result, manufacturers switched from other oils to lard, and consumption increased almost as much as production did. Imports, at 24.1 million pounds, were slightly below the 1966 level of 24.7 million, all from the United States in both years.

Tallow production was up by 30 million pounds to 272.5 million, with practically all of the increase in output of the inedible product. While imports held fairly steady at about 7,000 pounds exports rose to 145.8 million from 136.3 million in 1966. Japan, the Netherlands, and the United States all took larger quantities, helping to offset a drop of 20 million pounds in the amount sold to Cuba.

Uruguay's Oilseed Crops Cut by Drought

The combined production of flaxseed, sunflowerseed, and peanuts in Uruguay in 1968 fell 36 percent below the 1967 level, owing primarily to the long dry period beginning in December 1967 and continuing through the first quarter of 1968. Acreage planted also declined. Heavy rains during the planting season reduced flaxseed acreage 22 percent.

Edible oil production in 1968 from the decreased sunflowerseed and peanut crops is expected to total 10,500 metric

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tons—7,300 tons less than last year's output. This deficit together with reduced stocks of edible fats and oils at the beginning of 1968 may make necessary the importation of approximately 10,000 tons of edible oil to meet domestic requirements.

OILSEED PRODUCTION IN URUGUAY

Oilseed	Area		Production	
	1967 [1]	1968	1967 [1]	1968
	1,000 acres	*1,000 acres*	*1,000 metric tons*	*1,000 metric tons*
Flaxseed	163	[1]126	40.4	[1]27.4
Sunflowerseed	405	[2]371	76.0	[2]46.0
Peanuts	8	[2]8	2.2	[2]1.9
Total	576	505	118.6	75.3

[1] Estimates of the Ministry of Agriculture. [2] Preliminary estimates of the National Subsistence and Price Control Council.

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Argentine Soybean Output Increasing

Soybean production in Argentina, while still minor, reached a new high of 24,400 metric tons (897,000 bu.) in 1968, according to the first Argentine estimate. Production increased 19 percent above the 20,500 tons harvested in 1967. Soybean cultivation has expanded remarkably since 1962 when production totaled 1,000 tons.

This year's increase was principally in Tucuman Province where farmers cultivated more soybeans as result of restrictions placed on sugar production. Output jumped from 2,700 tons in 1967 to 10,200 in 1968.

Malawi Has Smaller Tobacco Crop

Current estimates place Malawi's 1967-68 tobacco crop at 30.5 million pounds, compared with last season's 35.6 million. The reduction is in line with the government's desire to bring supplies (mainly fire-cured) more in line with existing demand. Forecasts indicate drops in production of fire-cured and burley tobaccos, but some increases in flue-cured and sun/air-cured.

The current flue-cured crop is placed at about 5.6 million pounds, up 40 percent from last year's 4.0 million. For sun/air—cured, the crop is expected to reach 3.0 million, against 2.5 million in 1966-67. However, the burley tobacco production will be about 4.9 million, about 1 million less than that for last season. The big drop is expected in fire-cured tobacco, with production this year at 17 million pounds—down 26 percent from last year's 23.2 million.

Ireland's Tobacco Imports Steady

Ireland imported a total of 13.3 million pounds of unmanufactured tobacco last year, about the same amount as in 1966. About 91 percent of the 1967 imports were of U.S. origin, down from 95 percent in 1966. The only other suppliers of any significance in 1967 were Canada, Malawi, India, and Rhodesia.

Cigarette output in Ireland rose to 11,518 million pieces in 1967, a gain of 2.2 percent from 1966. Irish tobacco factories used an estimated 13.9 million pounds of tobacco last year. This was 12 percent more than in 1966 with the increase attributed to gains in domestic demand for cigarettes, and larger sales abroad for cigars and smoking tobaccos.

IRELAND'S TOBACCO IMPORTS

Origin	1965	1966	1967
	1,000 pounds	*1,000 pounds*	*1,000 pounds*
United States	9,767	12,680	12,012
Canada	251	226	494
Malawi	335	188	279
India	111	27	254
Rhodesia	985	223	159
Others	241	4	57
Total	11,690	13,348	13,255

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